

# **ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION**

## **FINAL AIR QUALITY CONSTRUCTION PERMIT**

**Permit No. 0125-AC011**

**Issue Date: November 2, 2001**

The Department of Environmental Conservation, under the authority of AS 46.03, AS 46.14, 6 AAC 50, 18 AAC 15, and 18 AAC 50, issues this Air Quality Control Construction Permit to:

**Permittee:** Luciano General Contractors  
**Facility:** Green Machine Facility  
**Initially Located at:** Cold Bay Airport,  
Cold Bay Alaska  
55<sup>0</sup> 10' North, 162<sup>0</sup> 65' West

The project consists of the installation of one TARMAC Super 7 model 734 soil remediation unit, with a rated capacity of 50 tons of soil per hour. A Tarmac model P1424 pulse jet baghouse, will control particulate matter emissions. The Department authorizes the construction and statewide operation of the Green Machine Facility as described in the July 24, 2001 application under AS 46.14.120.

In accordance with AS 46.14.130(a), this permit allows the Permittee to establish the facility in accordance with terms and conditions of this permit. This permit contains terms and conditions necessary to ensure that the Permittee will build and operate the facility in accordance with 18 AAC 50.315(e).

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John Kuterbach, Program Manager  
Air Permits Program

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## List of Abbreviations Used in this Permit

AAC	Alaska Administrative Code
ADEC	Alaska Department of Environmental Conservation
AS	Alaska Statutes
ASTM	American Society of Testing and Materials
C.F.R.	Code of Federal Regulations
COMS	Continuous Opacity Monitoring System
dscf	Dry standard cubic feet
EPA	US Environmental Protection Agency
gr/dscf	grain per dry standard cubic feet (1 pound = 7000 grains)
GPH	gallons per hour
HAPS	Hazardous Air Pollutants [hazardous air contaminants as defined in AS 46.14.990(14)]
ID	Source Identification Number
MACT	Maximum Achievable Control Technology
Mlb	thousand pounds
NAICS	North American Industry Classification System
NESHAPs	Federal National Emission Standards for Hazardous Air Pollutants [as defined in 40 C.F.R. 61]
NSPS	Federal New Source Performance Standards [as defined in 40 C.F.R. 60]
PPM	Parts per million
PS	Performance specification
PSD	Prevention of Significant Deterioration
RM	Reference Method
SIC	Standard Industrial Classification
SO <sub>2</sub>	Sulfur dioxide
TPH	Tons per hour
TPY	Tons per year
VOC	volatile organic compound [as defined in 18 AAC 50.990(103)]
Wt%	weight percent

## **Standard Permit Conditions 1 – 10**

(Please note that these are standard conditions taken directly from 18 AAC 50.345(a)(1)-(10). Condition 10.a, does not limit the Federal Credible evidence rule 62 FR 8314 the permittee must comply with each permit term and condition.

1. Noncompliance constitutes a violation of AS 46.14, 18 AAC 50, and the Clean Air Act and is grounds for
  - a. an enforcement action,
  - b. permit termination, revocation and reissuance, or modification in accordance with AS 46.14.280, or
  - c. denial of an operating permit renewal application.

[18 AAC 50.345(a)(1), 1/18/97]
2. It is not a defense in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with a permit term or condition.

[18 AAC 50.345(a)(2), 1/18/97]
3. Each permit term and condition is independent of the permit as a whole and remains valid regardless of a challenge to any other part of the permit.

[18 AAC 50.345(a)(3), 1/18/97]
4. Compliance with permit terms and conditions is considered to be compliance with those requirements that are:
  - a. included and specifically identified in the permit, or
  - b. determined in writing in the permit to be inapplicable

[18 AAC 50.345(a)(4), 1/18/97]
5. The permit may be modified, reopened, revoked and reissued, or terminated for cause. A request by the permittee for modification, revocation and reissuance, or termination or a notification of planned changes or anticipated noncompliance does not stay any operating permit condition.

[18 AAC 50.345(a)(5), 1/18/97]
6. The permit does not convey any property rights of any sort, nor any exclusive privilege.

[18 AAC 50.345(a)(6), 1/18/97]
7. The permittee shall allow an officer or employee of the department or an inspector authorized by the department, upon presentation of credentials and at reasonable times with the consent of the owner or operator, to:
  - a. enter upon the premises where a source subject to the operating permit is located or where records required by the permit are kept,

- b. have access to and copy any records required by the permit,
- c. inspect any facilities, equipment, practices, or operations regulated by or referenced in the permit, and
- d. sample or monitor substances or parameters to assure compliance with the permit or other applicable requirements.

[18 AAC 50.345(a)(7), 1/18/97]

8. The permittee shall furnish to the department, within a reasonable time, any information the department requests in writing to determine whether cause exists to modify, revoke and reissue, or terminate the permit or to determine compliance with the permit. Upon request, the permittee shall furnish to the department copies of records required to be kept. The department, in its discretion, will require the permittee to furnish copies of those records directly to the federal administrator.

[18 AAC 50.345(a)(8), 1/18/97]

9. The permittee shall certify all reports, compliance certifications, or other documents submitted to the department under the permit as required by 18 AAC 50.205.

10. The permittee shall conduct source testing as requested by the department and shall:

- a. use the applicable test methods set out in 40 C.F.R. Part 60, Appendix A, and 40 C.F.R. Part 61, Appendix B, to ascertain compliance with applicable standards and permit requirements,
- b. submit to the department, within 60 days after receiving a request and at least 30 days before the scheduled date of the tests, a complete plan for conducting the source tests,
- c. give the department written notice of the tests 10 days before each series, and
- d. within 45 days after completion of the set of tests, submit the results, to the extent practical, in the format set out in *Source Test Report Outline* in Volume III, Section IV.3 of the State Air Quality Control Plan, adopted by reference in 18 AAC 50.030(8).

[18 AAC 50.345(a)(10), 1/18/97]

## **Requested Limits: PSD Avoidance for Sulfur-Dioxide**

### **11. To avoid classification as a Prevention of Significant Deterioration Major Facility:**

11.1 The permittee shall not operate the facility's soil remediation unit (SRU), more than 5,000 hours per 12-month rolling period. This limit applies to the facility's SRU, but not to the associated generator. Operations mean any time for which the rotary drier burner or auxiliary burner system is firing fuel.

11.2 Record during each day of SRU operation, the date and hours that the SRU operates in a logbook kept readily accessible at the facility.

11.3 Calculate and record:

- a. the total of the hours that the SRU operated each month
- b. the 12-month-rolling-total of the SRU's hours for each month.

Calculate the 12-month-rolling-total by :

adding the current monthly total to the monthly-totals from the preceding eleven months.

If the SRU has yet to operate for 12-months, calculate the cumulative hours of operation to-date.

For example, to calculate the 12 month rolling total for the month of November 2002, add the monthly-total from November 2002 to the total hours that the SRU operated during the time period between December 1<sup>st</sup> 2001 and October 31<sup>st</sup> 2002.

11.4 To confirm compliance with the 5000 hour limit stated in condition 11.1, include in the semiannual report the monthly total and monthly 12-month rolling total hours of SRU operations. The reporting requirements for the semiannual operation report are listed in condition 33.

## State Emission Standards

### 12. Drum Dryer, Rotary Kiln & Afterburner Visible Emissions

Do not reduce visibility through the exhaust effluent by more than 20% for a total of more than three minutes in any one hour.

12.1 Monitor according to compliance monitoring plan conditions 29.1b–29.1h, 29.2, 29.4, 29.6, and 29.8, 29.9.

12.2 Report in accordance with conditions 31.2 and 33.

[18 AAC 50.055(a)(1) 1/18/97 and 18 AAC 50.050(a)(1) 5/26/72] .  
[18 AAC 50.055(b)(1) & (3) 1/18/97 and 18 AAC 50.050(b)(1)&(3) 5/26/72]

### 13. Drum Dryer, Rotary Kiln & Afterburner Particulate Matter Emissions

Do not emit particulate matter concentrations greater than 0.05 gr/dscf if the facility commenced operation after July 1972, or 0.1 grains/dscf if the facility commenced operation before July 1972.

[18 AAC 50.055(b)(3)].

### 14. For facilities using a baghouse

Inspect the interior of the baghouse and complete any required maintenance prior to equipment startup in a new location or after shutdown periods lasting more than 5 days. Within two days of startup after relocating the facility, and at least every 30 days of operation at the same location, re-inspect the baghouse. Replace any worn out or damaged bags within 72 hours of discovery.

Operate the baghouse efficiently to control opacity and particulate matter.

Inspect every component of the control device before the first operation each season and repair or replace any component that shows signs of deterioration.

[18 AAC 50.055(a)(1), (b)(1) & (3) 1/18/97 and 18 AAC 50.050(a)(1),(b)(1)&(3) 5/26/72]

14.1 Monitor according to compliance monitoring plan conditions 29.6 and 29.8.

14.2 Report according to conditions 29.1, 31.2 and 33.11.

[18 AAC 50.055(b)(1) & (3) 1/18/97 and 18 AAC 50.050(b)(1)&(3) 5/26/72]

### 15. For facilities using a scrubber

Monitor and record once a day the minimum and maximum differential pressure across the gas side of the scrubber (inches of water).

Monitor the scrubber water flow rate on a daily basis.

Inspect every component of the control device before the first operation each season and repair or replace any component that shows signs of deterioration.

[18 AAC 50.055(a)(1), (b)(1) & (3) 1/18/97 and 18 AAC 50.050(a)(1),(b)(1)&(3) 5/26/72]

15.1 Monitor the operating parameters in accordance with conditions 29.1g and 29.1h.

15.2 Report any deviations in accordance with conditions 29.2 and 31.

[18 AAC 50.055(a)(1), (b)(1) & (3) 1/18/97 and 18 AAC 50.050(a)(1),(b)(1)&(3) 5/26/72]

**16. Drum Dryer, Rotary Kiln and Afterburner Sulfur-Oxide Emissions: Do not emit sulfur dioxide concentrations greater than 500 parts per million.**

[18 AAC 50.055(a)(1), (b)(1) & (3) 1/18/97, 18 AAC 50.050(a)(1), (b)(1) & (3) 5/26/72]

16.1 To Comply: Do not burn fuel oil with a sulfur content

a. Greater than 0.5% by weight.

b. Do not burn fuel oil with a sulfur content greater than 0.075% by weight while operating in the Sulfur Dioxide Special Protection Areas as defined in 18 AAC 50.025 and the permit application, Section X.

c. If burning used oil blend 1 part on-site generated used oil with at least 3 parts of fuel oil (25% used oil with 75% fuel oil).

16.2 Monitor according to monitoring plan conditions 29.14a and 29.14b

16.3 Report in accordance with condition 33.

[18 AAC 50.025(c)(1)&(2) 1/18/97]

[18 AAC 50.055(c) 1/18/97, 18 AAC 50.050(c) 5/26/72]

**17. Diesel Engines that do not meet EPA's definition of a "non-road" engine<sup>1</sup> and Insignificant Sources Visible Emissions**

Do not reduce visibility through the exhaust effluent by more than 20% for a total of more than three minutes in any one hour.

17.1 Monitor according to compliance monitoring plan conditions 29.6b and 29.12.

17.2 Report in accordance with conditions 31 and 33.

[18 AAC 50.055(a)(1) 1/18/97 and 18 AAC 50.050(a)(1) 5/26/72]

**18. Diesel Engines that do not meet EPA's definition of a "non-road" engine<sup>2</sup> and Insignificant Sources Particulate Matter Emissions**

Do not emit particulate matter concentrations greater than 0.05 gr/dscf.

18.1 Monitor diesel engines using monitoring plan conditions 29.6 and 29.12.

18.2 Report in accordance with conditions 31 and 33.

[18 AAC 50.055(b)(1) 1/18/97 and 18 AAC 50.050(b)(1) 5/26/72]

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<sup>1</sup> Non-road engines are defined in 40 CFR 89.2. See attachment 8 for the definition.

<sup>2</sup> Non-road engines are defined in 40 CFR 89.2. See attachment 8 for the definition.



**19. Diesel Engines that do not meet EPA's definition of a "non-road" engine<sup>3</sup> and Sulfur-Oxide Emissions:**

Do not emit sulfur dioxide concentrations greater than 500 parts per million.

[18 AAC 50.055(c) 1/18/97 and 18 AAC 50.050(c) 5/26/72]

**19.1 To Comply:**

- a. Do not burn fuel oil with a sulfur content greater than 0.5% by weight.
- b. Do not operate diesel engines for power generation while operating in the Sulfur Dioxide Special Protection Area as defined in 18 AAC 50.025 and the application, Section X.
- c. If burning used oil, blend on-site generated used oil (one part) with at least 3 parts fuel oil. (25% used oil with 75% fuel oil).

**19.2 Monitor according to monitoring plan conditions 29.14a and 29.14b.**

**19.3 Report in accordance with conditions 31 and 33.**

[18 AAC 50.055(c) 1/18/97 and 18 AAC 50.050(c) 5/26/72]

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<sup>3</sup> Non-road Engines are defined in 40 CFR 89.2. See attachment 8 for the definition.

## Federal Emission Standards

### 20. Equipment subject to Subpart OOO (40 CFR 60.670)

Equipment subject to Subpart OOO is at a fixed plant with a cumulative rating of all initial<sup>4</sup> crushers greater than 25 tons per hour; or at a portable plants with greater then 150 tons per hour cumulative ratings. Only the pieces of equipment installed, reconstructed<sup>5</sup> or modified after August 31, 1983 are subject to Subpart OOO. The pieces of equipment affected by the applicable conditions are rock crushers, grinding mills, screening operations, bucket elevators, belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations. Please see conditions 34 - 36 for requirements in order to replace parts of equipment subject to Subpart OOO.

#### 20.1 Emission Points without Mechanically Induced Air Flow

Conditions 29.12a, 29.12b and 29.12c apply to emission points at a processing plant that do not have mechanically induced airflow to capture or exhaust particulate matter. Performance tests are required.

Per 40 CFR 60.672(d), this condition does not apply to truck dumping into any screening operation, feed hopper, or crusher.

- a. Do not allow emissions to reduce visibility through the exhaust effluent by more than 15 percent opacity from any crusher at which a dust capture system is not used, (40 CFR 60.672(c)) or 10 percent opacity from each transfer point on a subject belt conveyor or from any other subject source (40 CFR 60.672(b))
- b. Monitor these operations according to conditions 29.2, 29.15, and 29.16.
- c. Report operations in accordance with conditions 31 and 33.

20.2 At all times, the permittee shall to the extent practicable, maintain and operate their facility including air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

20.3 Mark each piece of equipment that is subject to Subpart OOO with the letters "NSPS" that are plainly visible and are at least 3 inches high, or with other clearly identifiable markings.

[40 CFR 60.11(d), 3/26/87]  
[18 AAC 50.350(d)(3), 1/18/97]

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<sup>4</sup> Initial crushers are defined as crushers that process some rock that has not been previously crushed.

<sup>5</sup> Reconstructed is defined in 40 CFR 60.673.

**21. Subpart Kb Storage Tanks<sup>6</sup> Volatile Organic Compounds**

Subpart applies to stationary fuel storage tanks that are:

- a. Constructed, reconstructed or modified after July 23, 1984; and
- b. Have a capacity:
  - (i) between 10,000 and 20,000 gallons;
  - (ii) between 20,000 and 40,000 gallons and store fuels that exert an equilibrium vapor pressure less than 2.2 psia; or
  - (iii) greater than 40,000 and store fuels that exert an equilibrium vapor pressure less than 0.5 psia.
- c. Stationary means tanks not attached to a mobile vehicle or vessel.

21.2 Keep accessible records for the life of the vessel subject to this requirement showing the dimension of each storage vessel, its capacity and the calculations for computing capacity of the storage vessel. 40 CFR 60.116b(a) & (b) 4/8/87

[adopted by reference in 18 AAC 50.040(a)(2)(M) 1/18/97, 40 CFR 60.116b(a) & (b) 4/8/87]

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<sup>6</sup> A Subpart Kb storage tank is defined as a storage vessel with a capacity greater than or equal to 40 cubic meters used to store volatile organic liquids at a facility that is constructed, reconstructed, or modified after July 23, 1984.

## Facility-Wide Conditions

### 22. Fugitive Dust Prohibition

Take reasonable precautions<sup>7</sup> to prevent the release of airborne particulate matter from the following:

treated and untreated soil piles,  
conveyors,  
loading locations,  
the drum dryer,  
crushers,  
screens,  
baghouse ash discharge,  
vehicle traffic within the facility boundaries, and  
any other sources of fugitive dust.

22.1 Comply with the fugitive dust plan submitted with the application. If requested by the department, submit a new fugitive dust control plan by a date indicated and comply with the new plan.

22.2 Monitor emissions and associated operating parameters according to monitoring plan condition 29.

22.3 Report in accordance with condition 33.

[18 AAC 50.045(d) 1/18/97]

[18 AAC 50.045(d) 1/18/97]

23. The plant shall not practice dispersion techniques as stated in 18 AAC 50.045 to meet the standards listed in this permit. Report using the annual compliance certification contained in this permit.

[18 AAC 50.045(a) 1/18/97, 18 AAC 50.530 (a) 11/1/82]

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<sup>7</sup> "Reasonable precautions" for soil remediation units include but are not limited to the following, as necessary to prevent particulate matter from becoming airborne and leaving the facility boundaries:

- ◇ installation and use of hoods, fans, and dust collectors to enclose and vent dusty materials;
- ◇ other covers and enclosures to prevent generation or release of fugitive dust;
- ◇ cleanup of loose material on work surfaces;
- ◇ minimizing drop distances by adjusting conveyor heights or lowering loader buckets to be in contact with surface of soil or ground before dumping; and
- ◇ application of asphalt, water, or suitable chemicals to prevent generating fugitive dust.

**24. Operation & Maintenance**

[18 AAC 50.055(a) and (b)]

24.1 Follow the Operations and Maintenance Plan that was submitted with the application (to the department). The plan describes how the facility will be operated and maintained in order to comply with the emission limits as specified in this permit.

24.2 Monitor the facility operations and maintenance in accordance with condition 29.2.

24.3 Report deviations from the plan in accordance with conditions 32 and 33.

[18 AAC 50.055(a)(1) &amp; (b)(1) 1/18/97, 18 AAC 50.050(a)(1)&amp;(b)(2) 5/26/72]

24.4 Air Pollution Prohibited *State only requirements* authorized in 18 AAC 50.350(f)(3)

- a. Install an afterburner to destroy organic compounds removed from the contaminated soil. Operate the equipment so that the concentration of carbon monoxide in the afterburner exhaust gas does not exceed 100 parts per million corrected to 7 percent oxygen during operation and shut down operations. This threshold is a 1-hour average based on continuous emission monitor (CEM) 1-minute readings.
- b. Install, calibrate, operate, and maintain the CEM to measure and record the concentrations of carbon monoxide from the afterburner exhaust stack.
- c. Prior to adding soils to the unit, heat and maintain the afterburner temperature to at least 1500EF.
- d. Only remediate soils that are contaminated with: crude oil, liquefied natural gas, gasoline, fuel oil, and other non-chlorinated refined petroleum products. Do not burn soil contaminated with hazardous waste listed under the Resource Conservation and Recovery Act (RCRA) or toxic substances listed under the Toxic Control Act (TSCA).
- e. Comply with the VOC control plan submitted with the application. If requested by the department, submit a new VOC control plan by a date indicated and comply with the new plan.
- f. Monitor according to monitoring plan conditions 29.2, 29.7 and 29.13.
- g. Report in accordance with conditions 31.1 and 31.2.

**25. Air Pollution Prohibited**

Do not allow any release of emissions in quantities or duration that are injurious to human health or welfare, animal or plant life, or would unreasonably interfere with the enjoyment of life or property.

25.1 Address pollution complaints resulting from emissions at the facility within 72 hours of the received complaint at a minimum of contacting the person who reported the complaint.

[18 AAC 50.110 5/26/72]

25.2 Monitor according to condition 29

25.3 Report in accordance with conditions 31, 32 and 33

**26. Coastal Zone Management (CZM) [These are state only requirements]**

26.1 If the facility plans to locate in the Aleutians West Coastal Resource Service Area (AWCRSA), contact the local municipal or tribal officials, landowners, and the AWCRSA to get necessary local permits or approvals and to find a preferred site for operations.

[18 AAC 50.350(f)(3), 1/18/97]

26.2 If the facility plans to locate in the AWCRSA and stores greater than 5,000 gallons, comply with AWCRSA policies C-10 (storage of petroleum and petroleum products) and C-11 (spill containment and cleanup equipment).

[18 AAC 50.350(f)(3), 1/18/97]

**27. Notification of Re-Location Required:**

Notify the department, using attachment 2, at least 30 days before the tentative date of relocation as required by Alaska Statute 46.14.215, and follow-up with the exact date before the equipment startup by letter, fax, phone or e-mail as required by condition 33.13 using Attachment 2.

[AS 46.14.215, 6/25/93]

**28. Emission Fees:**

28.1 Determine the fuel consumed in the facility as required by monitoring plan condition 29.5.

28.2 Calculate the sulfur dioxide emissions using the sulfur dioxide formula listed in Attachment 4.

28.3 Report facility fuel consumption in accordance with condition 33.5.

28.4 Estimate the annual emissions for the period from July 1 to June 30 of the following year, using the formulas listed in Attachment 4 and submit to the department no later than August 1.

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- 28.5 Pay the annual emission fees in accordance with the permit application using the formulas listed in Attachment 4.

[18 AAC 50.410 1/18/97]

## Compliance Monitoring Plan

- 29.** Obtain the following records to determine compliance with the permit conditions. Keep these records accessible for five years.

[18 AAC 50.350(h)(5) 1/18/97]

### 29.1 Daily Records (if operating, keep the following records a-i)

- a. Date: \_\_\_\_\_
- b. Tons of contaminated soil processed: \_\_\_\_\_.
- c. Maximum hourly processing rate: \_\_\_\_\_ tons/hr
- d. The average fines percentage \_\_\_\_\_ ASTM D422-63 or equivalent, at least once per job, repeat if soil characteristics change.
- e. Baghouse temperature (Fahrenheit)
- f. Differential pressure across the baghouse (inches of water)
- g. Minimum and Maximum differential pressure drop across the scrubber:  
\_\_\_\_\_ inches of water
- h. Minimum water flow rate: \_\_\_\_\_ gallons/hr
- i. ☐ Yes ☐ No Did you deviate from the dust or VOC control plan? If yes, explain how you deviated from the plan and why you deviated from the plan.

[18 AAC 50.350(d)(3) 1/18/97 for M1-M9]

### 29.2 Deviation from Permit Conditions (as necessary)

Keep a list of all deviations from Conditions 11 - 22. Include

- ❖ The date;
- ❖ The equipment involved;
- ❖ The permit condition;
- ❖ A description of the deviation; and
- ❖ Actions taken to solve the problem.

[18 AAC 50.350(d)(3)& (f)(3) 1/18/97]



### 29.3 Complaint Logs (as necessary)

Keep a written log of all:

- ❖ Air pollution complaints received;
- ❖ Dates of complaints and permittee's response to complaints;
- ❖ Investigations to determine the cause of the complaints; and
- ❖ Any actions taken to resolve the complaints and the date the action was taken.

[18 AAC 50.350(f)(3) 1/18/97]

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Signature

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Printed Name

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Title

29.4 Visible Emission Monitoring:

(upon startup, and every 30 days of operations in same location)

Visible emission readings shall be taken when the facility is operating at or near maximum load. The facility shall perform a visible emission observation in accordance with 40 C.F.R. 60, Appendix A, Method 9. The visible emission readings should occur within two days of startup at a new location, at least once during a 30-day operating period at the same location and when the facility starts up after a shut down period of more than 5 days. Use the form in Attachment 1. This requirement does not apply to heaters and insignificant sources. Note the equipment production or operating rate at the time of the Method 9 observation. Method 9 testing consists of at least 24 readings, one every 15 seconds.

29.5 Semi-annual fuel monitoring:

Record the amount of fuel used at the facility during the semi-annual operating reporting period.

[18 AAC 350(d)(3) 1/18/97]

29.6 Keeping Maintenance Logs:

- a. Keep a maintenance log of all baghouse inspections and bag replacement.
- b. Keep a maintenance log of activities performed in accordance with the manufacturer's preventative maintenance plan and the Operations and Maintenance Plan submitted to the department.

[18 AAC 350(d)(3) 1/18/97]

29.7 Daily Monitoring and Recordkeeping:

Monitor and record once per day the afterburner outlet temperature (EF).

Monitor and record the carbon monoxide emissions using 40 C.F.R. 60, Appendix A, Reference Method 10. All applicable quality procedures in 40 CFR 60 Appendix F should be monitored and reported.

[18 AAC 350(d)(3) 1/18/97]

29.8 For facilities using a baghouse:

Do not exceed the baghouse minimum and maximum operating temperature determined by manufacturer's data or source test data. Maintain the manufacturer's recommended or source test determined differential pressure across the baghouse. Monitor and record once a day the baghouse exit temperature (EF) and differential pressure (see conditions 29.1e and 29.1f).

[18 AAC 50.055(b)(1) & (3) 1/18/97 and 18 AAC 50.050(b)(1)&(3) 5/26/72]

29.9 For facilities using a scrubber:

Install and maintain manometer ports for measuring gas side pressure drop across the scrubber. Maintain a pressure drop no lower than 70% but no higher than 130% of the average pressure drop for which the most recent source test demonstrated compliance.

Maintain a scrubber water flow rate that is at least 80% of the average water flow rate for which the most recent source test demonstrated compliance.

[18 AAC 50.055(a)(1)/(b)(1) & (3) 1/18/97 and 18 AAC 50.050(a)(1)/(b)(1)&(3) 5/26/72]

#### 29.10 Once in permit:

If the permittee did not submit a particulate matter source test (in accordance with Condition 10) with the application or refer to a source test less than 5 years old on file with the department, the facility must conduct a source test within the first 30 operating days. If the results for the most recent test are 0.045 gr/dscf or greater, conduct another source test within one year. When conducting a source test, record the information included in Attachment 5. The source test should occur while processing soil that is representative of what the facility normally processes. Record the fines content and soil throughput that represents normal operation.

[18 AAC 50.055(b)(1) & (3) 1/18/97 and 18 AAC 50.050(b)(1)&(3) 5/26/72]

#### 29.11 Before processing soil greater than 30% fines:

Conduct a particulate matter source test when remediating soil containing 30% fines or greater, as determined by ASTM D422-63 or equivalent unless this is representative of your process as tested in condition 29.10, in the range where the source test showed compliance with the particulate standard. In lieu of a source test, the following equation may be used or another equation proposed by the permittee. The department must approve the equation proposed by the permittee prior to remediating the soil.

F = fines (%)

R = Soil production rate (tons/hr or lb/hr)

X = particulate concentration (gr/dscf)

Test = values from source test in M21

25% = SF safety factor  
produce

Actual = what the facility would like to

$$F_{\text{actual}} * R_{\text{actual}} = \frac{0.05 \text{ gr/dscf} * F_{\text{test}} * R_{\text{test}}}{X_{\text{test}}} * (1-SF)$$

Example: A facility source test shows compliance with the particulate standard at a Soil production rate of 10,000 lbs/hr at 15% fines. They have a job remediating soil with 30% fines content. Find the maximum soil production rate that will maintain compliance with the particulate standard. The facility source test showed particulate matter emissions of 0.03 gr/dscf at 15% fines and a soil production rate of 10000 lbs/hr.

$$0.3 * R_{\text{actual}} = 0.05 \text{ gr/dscf} * 0.15\% * 10,000 \text{ lbs/hr} * 0.75\%$$
$$0.03 \text{ gr/dscf}$$

$$R_{\text{actual}} = 6250 \text{ lb/hr}$$

The facility may not exceed 6250 lb/hr while processing soil with 30% fines.

[18 AAC 50.055(b)(1) & (3) 1/18/97 and 18 AAC 50.050(b)(1)&(3) 5/26/72]

29.12 Visible Emissions and Particulate Matter Inspections.

[18 AAC 50.350(d)(4) 1/18/97]

A flow chart contained in ATTACHMENT 9 illustrates this tiered monitoring approach.

a. Smoke/No smoke Inspection Period

- (i) Once a day for the first 30 operating days of this permit, observe each engine, boiler, and heater to determine the presence or absence of smoke (a smoke/no-smoke inspection). If smoke, excluding water vapor, is seen during the inspection, do one of the following supplemental actions:

Do maintenance to eliminate the smoke, and repeat the smoke/no smoke inspection within 72 operating hours; if no smoke is seen during the required repeat inspection, start a new 30 day inspection period; or,

Within 10 calendar days, not operating days, of the initial inspection that showed smoke, do a visible emission inspection that conforms to EPA Method 9 in 40 C.F.R. 60, Appendix A, three times, once every two hours. See section b of this condition for more detail on the Method 9 test.

- (ii) Monthly monitoring

If no smoke is seen during the first 30 days of operation during the smoke/no smoke inspection, continue smoke/no smoke inspections on a monthly basis to check for engine or combustion unit degradation.

If smoke is seen during any monthly inspection, start a new 30-day smoke/no smoke inspection period or do the Method 9 testing described in Section b of this condition.

- (iii) How to perform the smoke/no smoke inspection

For each smoke/no smoke inspection, record:

- ❖ Date
- ❖ Engine or equipment number
- ❖ Load,
- ❖ Plume background, and
- ❖ Visible emission observation.

Do all inspections required by this condition at the highest load for that engine or combustion unit expected for the month. If this is not practicable or the test is less than 80% of design load, please attach an explanation.

*Exceptions:*

*The visible emission inspections are not required in a given month for a boiler or heater, if the rated input capacity is less than 1,700,000 Btu/hr.*

b. Method 9:

- (i) If the facility is not able to eliminate visible emissions through maintenance then the facility is required to perform an opacity test using EPA Method 9 within 10 calendar days of the initial smoke/no smoke inspection that showed smoke. The opacity test consists of three Method 9 tests, taken with minimum of two hours in between each test.
- (ii) If the results of each of the three Method 9 tests are zero, then the facility may begin a new 30-day smoke/no smoke inspection as described in section a or perform one Method 9 reading each subsequent month.
- (iii) If the results of each of the three Method 9 reading are greater than zero but less than 20% opacity, perform one Method 9 reading each subsequent month.
- (iv) If any of the three-minute average of the method 9 readings are greater than 20%, the facility is in violation of the opacity standard.
- (v) If at any time the opacity readings are greater than 12% opacity, in addition to the requirements of this section, please see section c concerning particulate emissions.
- (vi) If the required monthly Method 9 opacity reading for three consecutive months is zero, the permittee can continue performing Method 9 readings once per month or perform a 30-day smoke/no smoke inspection as described in section 29.12a(i) of this monitoring condition. If no smoke is seen during the 30-day test, the permittee may perform monthly smoke/no smoke inspections every month instead of Method 9 readings.
- (vii) For each Method 9 inspection, use the form in Attachment 1 of this permit.

c. Particulate Matter

- (i) If the Method 9 readings required in section b are greater than 12% but less than 20% opacity, then particulate matter emissions may exceed the particulate matter standard. Perform a Method 5 or other EPA approved method source test (within 30 days of Method 9 reading that exceeded 12%) to determine if the standard is maintained and that the particulate emissions are less than 0.05 gr/dscf. Continue the Method 9 readings as described in section b. Take Method 9 readings during the particulate matter tests in order to calculate an average opacity that corresponds to the particulate matter emissions. Submit the test results to the Department within 30 days of the testing completion.

[18 AAC 350(d)(3) 1/18/97]

29.13 Certify each carbon monoxide CEM in accordance with 40 C.F.R. 60, Appendix B, Performance Specifications 3 and 4. Record daily calibration drift measurements and take action required in Attachment 7.

29.14 Fuel & Used Oil Delivery

- a. Keep a delivery receipt for each shipment of fuel and used oil delivered to the facility. If using fuel oil other than ASTM D1, D2, or comparable, test each shipment for the fuel oil using the applicable ASTM Method. Acceptable methods include D975-84; D3120-92; D4152-90; D2622-91 and D4294-90. If using ASTM D1, D2, or comparable, keep copies of the fuel delivery records that indicate the ASTM fuel grade as defined in ASTM 396-92.

[18 AAC 350(d)(3) 1/18/97]

- b. If burning used oil generated off-site, test the sulfur content of each shipment of used oil that is generated off-site and record the quantity of fuel accepted or keep supplier's sulfur content analysis. Test the fuel used to fulfill the blending requirement using the applicable ASTM test method and record the quantity of fuel used in the blend. Supplier certification is adequate as long as blending does not occur. Samples may be collected by the vendor from batches prepared by the local supplier for delivery to permittee's facility, or by supplier for bulk shipment not blended prior to delivery to the permittee's facility. If burning used oil generated on site, keep records of quantities.

[18 AAC 350(d)(3) 1/18/97]

**29.15 For Subpart OOO Non-Metallic Mineral Processing Plant -During the first 60 days**

Inspect each emission point subject to Condition 20 using Method 9 of 40 C.F.R. 60, Appendix A at the following times:

- a. within 2 working days after startup at each new location,
- b. within 2 working days after startup after the processing plant has been shut down for 30 consecutive days; and
- c. at least once in every 14 days of operation.
- d. When doing Method 9 inspections, use the form in Attachment 1 of this permit.

[18 AAC 50.350(d)(3), 1/18/97; 40 C.F.R. 60.675(c), 2/4/89 40 C.F.R. 60.11(b)]

29.16 If a performance test was not included with the permit application conduct a performance test as described by 40 C.F.R. 60.675(b)(1) and (2), within the first 60 days of operation under this permit. A performance test includes a Method 9 to determine visible emissions. Use the form provided in Attachment 1. Follow the requirements for a performance test given in condition 30.

**30. Performance Tests**

(as required by 40 CFR 60.675 conducted as specified in 40 CFR 60.8)

- 30.1 Perform performance tests within 60 days after achieving the maximum production rate of the equipment subject to a federal standard but not later than 180 days after initial startup. (This timeframe is for new units only) The department and/or EPA may request additional performance test at their discretion. Please see M28 for required performance testing for existing units.

[40 CFR 60.8(a), 5/17/89]

- 30.2 Performance tests shall occur at the facility's representative operation. The permittee shall make available information so that the department and/or EPA can determine the facility's representative operation.

[40 CFR 60.8(c), 5/17/89]

- 30.3 Notify the department and EPA at least 30 days prior to the start of the performance tests.

[40 CFR 60.8(d), 5/17/89]

- 30.4 The permittee's initial opacity (visible emission) performance test must be 3 hours (30 six minute averages) during periods of operation. The opacity standard applies at all times except for startup, shutdown and malfunction.

[40 CFR 60.11(b) and (c), 3/26/87]

## Reporting Requirements

The department requires a facility operator using this general permit to perform four types of reports:

- (1) reporting emissions that have the potential to violate a permit condition,
- (2) semiannual operating reports,
- (3) notification of replacement of certain equipment, and
- (4) annual compliance certifications.

### 31. Reporting of Excess Emissions:

#### 31.1 Potentially Injurious Emissions

Notify the department immediately upon discovery of any emission that has the potential to violate Condition 19 or 20, at one of the following numbers:

Central Alaska                      269-7500                      Fax                      269-7648

Northern Alaska 451-2121                      Fax                      451-2362

Southeast Alaska 465-5340                      Fax                      465-2237

Outside of normal business hours: 1-800-478-2237

Fax a completed Excess Emission Notification form (Attachment 6) within 24 hours to the Anchorage air quality office at 907 269 7508.

[18 AAC 350(i)(1) 1/18/97]

#### 31.2 Opacity, Particulate Matter and Fuel Sulfur Violations

[18 AAC 350(i)(1) 1/18/97]

Notify the department within two days of:

Completion of a Method 9 inspection showing a violation of a visible emission requirement;

Receipt of results of a Method 5 performance test that shows a violation of a particulate matter standard; or

Burning any fuel that exceeds 0.50% fuel sulfur or 0.075% sulfur within any Special Protection Area.

### 32. Immediate Reporting:

Notify the department within two days of a pollution control equipment breakdown.



## Semi-Annual Operating Report

### 33. Semiannual Operating Reporting

The information in condition 33 must be submitted to the department as follows:

- (1) Submit three copies, including the original, of this semi-annual operating report to:

Alaska Department of Environmental Conservation  
Air Quality Maintenance Section  
610 University Avenue  
Fairbanks, Alaska 99709-3643

- (2) And one copy to:

EPA-Region 10,  
Office of Air Quality  
1200 Sixth Avenue  
Seattle, WA 98101

Facility Name \_\_\_\_\_

Date: \_\_\_\_\_

Semiannual Compliance Report for:

10/1/\_\_\_ - 3/31/\_\_\_ Due on April 30

4/1/\_\_\_ - 9/30/\_\_\_ Due on October 30

(Select the correct operating period)

33.1 Did the facility deviate from any permit requirements or a fugitive dust or VOC control plan?

a. If yes, explain:

- (i) how you deviated from the plan,
- (ii) the cause of the deviation, and
- (iii) if it was necessary.

b. Attach:

- (i) Copies of all visible emission reading results.
- (ii) Copies of all particulate matter performance test reports.
- (iii) A description of any complaints received, including:
- (iv) Date of the complaint and the response,

- (v) Nature of the complaint,
- (vi) Results of the investigation, and
- (vii) Steps taken to resolve the complaint.
- (viii) A list of any deviations from permit conditions; include:
  - ❖ The date or period
  - ❖ Equipment involved
  - ❖ The permit condition
  - ❖ The nature of the deviation
  - ❖ Actions taken to solve the problem

[18 AAC 50.350(d)(3), 18 AAC 50.350(i), 1/18/97

33.2 Fuel Delivery dates and grades:

Dates:	Quantity:	Fuel Grade:	or	Sulfur Content:
_____	_____	_____		_____
_____	_____	_____		_____
_____	_____	_____		_____
_____	_____	_____		_____
_____	_____	_____		_____

33.3 Off-Site Used Oil Delivery:

Dates:	Quantity:	Sulfur Content:
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

33.4 Burned Used Oil (generated on-site):

Dates:	Quantity:	:
_____	_____	
_____	_____	
_____	_____	
_____	_____	

- 33.5 The amount of fuel used on a monthly basis:
- 33.6 How did you ensure your facility blended the amount of used oil burned to achieve a 0.5% Sulfur by weight or less mix?
- 33.7 How did you ensure your facility blended the amount of used oil generated on-site to achieve a one part used oil to three parts fuel oil mix?
- 33.8 Attach copies of the required visible emission readings.
- 33.9 For each day, the daily contaminated soil process rate and the total number of operation hours and peak hourly rate and percent fines.
- 33.10 Provide a copy of any complaints received the nature of the complaint, and the steps taken to resolve the complaint including the date of when the person that initiated the complaint was contacted.
- 33.11 Report any deviations from the facility's submitted Operations and Maintenance Plan.
- 33.12 Submit any CEMS hourly average that exceeds the permitted limit and averaging times.
- 33.13 Report relocation using Attachment 2. Follow up with exact date before the equipment startup via phone call, e-mail, letter or fax.

Based on information and belief formed after reasonable inquiry, I certify that the facility meets the qualifying criteria and that the statements and information in and attached to this document are true, accurate, and complete.

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Signature

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Printed Name

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Title

State of Alaska, City of \_\_\_\_\_, Borough of \_\_\_\_\_

## **Replacing Equipment Built Before August 31, 1983**

At your processing plant, equipment that was not constructed, reconstructed, or modified after August 31, 1983, is not subject to Subpart OOO. Replacing certain parts of it with equipment that is the same size or smaller does not make your plant subject to Subpart OOO, unless you replace all sources in a production line. But you must notify EPA and the department of the replacement.

**34.** If equipment is replaced with larger equipment, report in accordance with condition 35 to report.

**35.** Notifying the Department and EPA: Replacement of Equipment

Notify the department before replacing the following equipment. In addition to the information listed in Conditions 35.1 - 35.4, give enough detail to identify the replacement equipment. Also list any control device used to reduce particulate matter emissions from the equipment being replaced, and all other sources controlled by that control device.

[40 C.F.R. 60.676(a), 2/14/89; 18 AAC 50.200, 1/18/97]

Send notifications for condition 35 to:

- (1) Director of Emission Standards and Engineering Division  
(MD-13)  
U.S. Environmental Protection Agency  
Research Triangle Park, NC 27711
- (2) Air Quality Maintenance Section  
Alaska Department of Environmental Conservation  
610 University Ave.  
Fairbanks, AK 99709-3643

**35.1** Before replacing a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station, send the department information describing:

the rated capacity (tons/hour) and age of the equipment being replaced, and

the rated capacity (tons/hour) of the replacement equipment.

**35.2** Before replacing the screening operation, send the department information describing:

the total surface area and age of the top screen from the existing screening operation, and

the total surface area of the top screen of the replacement.

**35.3** Before replacing a conveyor belt, send the department information describing:

the width and age of the existing belt, and

the width of the replacement belt.

35.4 Before replacing a storage bin, send the department information describing:

the rated capacity (tons) and age of the existing storage bins, and

the rated capacity (tons) of the replacement storage bins.

Send notifications for condition 36.2 to:

Director of Emission Standards and Engineering Division

(MD-13)

U.S. Environmental Protection Agency

Research Triangle Park, NC 27711

Air Quality Maintenance Section

Alaska Department of Environmental Conservation

610 University Ave

Fairbanks, AK 99709-3643

## New Equipment Subject to Subpart 000

### 36. Notifying the Department and EPA: New, Reconstructed, or Modified Equipment

Send notifications for condition 36 to:

- (1) Laurie Kral  
EPA Region 10  
1200 Sixth Ave.  
Seattle, WA 98101 and
- (2) Air Quality Maintenance Section  
Alaska Department of Environmental Conservation  
610 University Ave  
Fairbanks, AK 99709-3643

For a new or modified piece of equipment that becomes subject to Subpart 000, send the department and EPA Region 10 any of the following information that applies to this condition during the life of this permit:

- ❖ A modification is defined as a change to the equipment that increases
- ❖ The surface area of an initial screen
- ❖ The width of a conveyor belt, or
- ❖ The rated capacity of any other equipment

36.1 The anticipated date of initial startup, postmarked between 30 and 60 days before anticipated startup.

[40 C.F.R. 60.7(a)(2), 12/13/90; 18 AAC 50.200, 1/18/97]

36.2 The actual date of initial startup postmarked within 15 days after initial startup.

[40 C.F.R. 60.7(a)(3), 12/13/90; 18 AAC 50.200, 1/18/97]

36.3 For modification to an existing piece of equipment of a type listed in QC1. of the Qualifying Criteria of this permit, information describing:

- ❖ the precise nature of the change
- ❖ the present and proposed emission control systems
- ❖ the capacity before and after the change
- ❖ the expected completion date.

This condition does not apply to

- ❖ Routine maintenance, replacement, and repair
- ❖ Increase in production rate accomplished without capital expenditure
- ❖ Increase in hours of operation
- ❖ Use of alternative raw material if the equipment is already designed to handle that raw material
- ❖ Addition of pollution control equipment
- ❖ For notification requirement, condition 36.3 postmark 60 days or as soon as practicable before the change.

[40 C.F.R. 60.7(a)(4), 12/13/90; 18 AAC 50.200, 1/18/97]

36.4 The date of initial Method 9 observations, –postmarked not less than 30 days before the date of the observations.

[40 C.F.R. 60.7(a)(6), 12/13/90; 18 AAC 50.200, 1/18/97]

## Annual Compliance Certification

- 37.** Certify compliance annually by February 1 of each year for the period from January 1 to December 31 of the previous year in accordance with the format below. Submit two copies and the original to the ADEC, Air Quality Maintenance, 610 University Ave, Fairbanks, AK 99709-3643.

Also submit a copy to: US EPA Region 10, Office of Air Quality, 1200 6<sup>th</sup> Avenue, M/S OAQ 107, Seattle, Washington 98101

Permittee: \_\_\_\_\_ Facility Name: \_\_\_\_\_ Certification  
Period: \_\_\_\_\_

Condition	Compliance Status	Continuous/Intermittent	Method used to determine compliance
1 - 6	These conditions place no certification obligation on permittee		
7	In Compliance Not in Compliance Not Applicable (attach explanation)	Continuous Intermittent	Dates access granted, or not requested Other (attach description & documentation)
8	In Compliance Not in Compliance Not Applicable(attach explanation)	Continuous Intermittent	Dates submitted Other (attach description & documentation)
9	In Compliance Not in Compliance Not Applicable(attach explanation)	Continuous Intermittent	All reports/documents certified Dates excess emission reports submitted
10	In Compliance Not in Compliance Not Applicable(attach explanation)	Continuous Intermittent	Dates submitted, or source test requested Other (attach description & documentation)
12	In Compliance Not in Compliance Not Applicable(attach explanation)	Continuous Intermittent	All records kept Other (attach description & documentation)
13	In Compliance Not in Compliance Not Applicable(attach explanation)	Continuous Intermittent	All records kept Other (attach description & documentation)
14	In Compliance Not in Compliance Not Applicable(attach explanation)	Continuous Intermittent	All records kept Other (attach description & documentation)



Condition	Compliance Status	Continuous/Intermittent	Method used to determine compliance
15	In Compliance Not in Compliance Not Applicable(attach explanation)	Continuous Intermittent	All records kept Other (attach description & documentation)
16	In Compliance Not in Compliance Not Applicable(attach explanation)	Continuous Intermittent	All records kept Other (attach description & documentation)
18	In Compliance Not in Compliance Not Applicable(attach explanation)	Continuous Intermittent	All records kept Other (attach description & documentation)
19	In Compliance Not in Compliance Not Applicable(attach explanation)	Continuous Intermittent	All records kept Other (attach description & documentation)
20	In Compliance Not in Compliance Not Applicable(attach explanation)	Continuous Intermittent	All records kept Other (attach description & documentation)
21.2	In Compliance Not in Compliance Not Applicable(attach explanation)	Continuous Intermittent	All records kept Other (attach description & documentation)
22	In Compliance Not in Compliance Not Applicable (attach explanation)	Continuous Intermittent	All records kept Other (attach description & documentation)
23	In Compliance Not in Compliance Not Applicable (attach explanation)	Continuous Intermittent	All records kept Other (attach description & documentation)
24.1	In Compliance Not in Compliance Not Applicable (attach explanation)	Continuous Intermittent	All records kept Other (attach description & documentation)
24.4	In Compliance Not in Compliance Not Applicable(attach explanation)	Continuous Intermittent	All records kept Other (attach description & documentation)
25	In Compliance Not in Compliance Not	Continuous Intermittent	All records kept Other (attach description & documentation)

	Applicable(attach explanation)		
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Condition	Compliance Status	Continuous/Intermittent	Method used to determine compliance
26.2	In Compliance Not in Compliance Not Applicable(attach explanation)	Continuous Intermittent	All records kept Other (attach description & documentation)
28.3	In Compliance Not in Compliance Not Applicable (attach explanation)	Continuous Intermittent	All records kept Other (attach description & documentation)
28.4	In Compliance Not in Compliance Not Applicable (attach explanation)	Continuous Intermittent	All records kept Other (attach description & documentation)
28.5	In Compliance Not in Compliance Not Applicable (attach explanation)	Continuous Intermittent	All records kept Other (attach description & documentation)

Based on information and belief formed after reasonable inquiry, I certify that the facility meets the qualifying criteria and that the statements and information in and attached to this document are true, accurate, and complete.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name Title

State of Alaska, City of \_\_\_\_\_, Borough of \_\_\_\_\_

On this \_\_\_\_ day of \_\_\_\_\_, 19\_\_ before me personally appeared \_\_\_\_\_, whose identity was proved to me on the basis of satisfactory evidence to be the person whose name is subscribed t this instrument, and acknowledged that he (she) executed the same.

\_\_\_\_\_  
Notary Public

My Commission Expires on \_\_\_\_\_

## ATTACHMENT 1 -Visible Emissions Forms

Page 1 of \_\_\_\_\_

When doing readings: Maintain a distance of at least 15 feet from the emission point;

When possible while still conforming to Method 9, select a position to minimize interference between sources;

If interference cannot be avoided between sources, use the least stringent opacity standard that applies to any of the sources involved; and

If wet dust suppression is used, read the part of the plume where there are no visible emissions caused by water mist.

Company \_\_\_\_\_

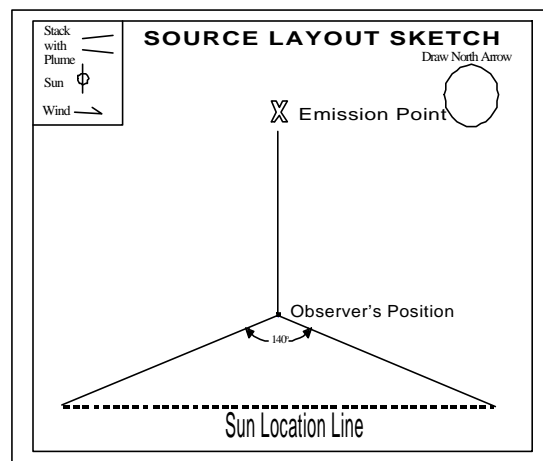
Location \_\_\_\_\_

Test No. \_\_\_\_\_ Date \_\_\_\_\_

Soil Remediation Unit: Source \_\_\_\_\_

Production Rate: \_\_\_\_\_ Tons/hr

Hrs. of observation: \_\_\_\_\_



Clock Time	Initial			Final
Observer location				
Distance to discharge				
Direction from discharge				
Height of observer point				
Background description				
Weather conditions				
Wind Direction				
Wind speed				
Ambient Temperature				
Relative humidity				
Sky conditions: (clear, overcast, % clouds, etc.)				
Plume description:				
Color				

Distance visible				
Water droplet plume? (attached or detached?)				
Other information				

Use the procedures specified in 40 C.F.R. 60, Appendix A, Method 9 to perform this observation.



### Visible Emissions Observation record

## Part 2, Observations

Page \_\_\_\_ of \_\_\_\_

Company \_\_\_\_\_ Observer \_\_\_\_\_

Test Number \_\_\_\_\_ Clock time \_\_\_\_\_

Method 9: A minimum of 25 readings every 15 seconds for a total averaging time of 6 minutes.

Method 22: A minimum of 15 minutes on each side of the building for a total duration of 75 minutes.

[illegible]

Additional information:

Observer Signature

## Average Opacity Summary

Set	Time	Opacity	
Number	Start--End	Sum	Average

## **ATTACHMENT 2. Portable Facility Relocation/Operation Notification**

Submit the information specified below to the Department's Air Quality Maintenance Section, *thirty* days before moving the plant to any new location, and before startup.

Name of Firm: \_\_\_\_\_

Facility/Equipment to be relocated \_\_\_\_\_

Contact Person: \_\_\_\_\_

Telephone: \_\_\_\_\_

New plant location (include site maps): \_\_\_\_\_

Approximate startup and shutdown dates: \_\_\_\_\_

Comments: \_\_\_\_\_

I hereby certify that the information contained in this notification is to the best of my knowledge and belief, is true, complete, and accurate.

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Telephone: \_\_\_\_\_

Submit the above information to:

Alaska Department of Environmental Conservation  
Division of Air & Water Quality - Air Permits Program  
610 University Avenue  
Fairbanks, Alaska 99709

### ATTACHMENT 3. Citation Table

This permit may apply if permit is needed under AS 46.14.130(b) and 18 AAC 50.325(b)(1) or 18 AAC 50.325(c)

Condition #s	Required By	Federal Citation	Incorporated by reference in	Approved SIP Citation 5/26/72	Current State Regulation 1/18/97
1 - 10	18 AAC 50.350(b)(3)				
12, 13, 14, 1516	18 AAC 50.350(d)(1)(C) 18 AAC 50.350(d)(1)(A) 18 AAC 50.350(d)(3)	40 C.F.R. 52.75*	18 AAC 50.040(e)	18 AAC 50.050(a)(1), 18 AAC 50.050(b)(1)	18 AAC 50.055(a)(1) 18 AAC 50.055(b)(1)
16	18 AAC 50.350(e)(2)(A) 18 AAC 50.350(d)(1)(C) 18 AAC 50.350(d)(1)(A) 18 AAC 50.350(d)(3)	40 C.F.R. 52.75*	18 AAC 50.040(e)	18 AAC 50.050(c)	18 AAC 50.055(c)(1)
17	18 AAC 50.350(d)(1)(C) 18 AAC 50.350(d)(1)(A) 18 AAC 50.350(d)(3)	40 C.F.R. 52.75*	18 AAC 50.040(e)	18 AAC 50.050(a)(1)	18 AAC 50.055(a)(1)
18	18 AAC 50.350(d)(1)(C) 18 AAC 50.350(d)(1)(A) 18 AAC 50.350(d)(3)	40 C.F.R. 52.75*	18 AAC 50.040(e)	18 AAC 50.050(b)(1)	18 AAC 50.055(b)(1)
19	18 AAC 50.350(e)(2)(A) 18 AAC 50.350(d)(1)(C) 18 AAC 50.350(d)(1)(A) 18 AAC 50.350(d)(3)	40 C.F.R. 52.75*	18 AAC 50.040(e)	18 AAC 50.050(c)	18 AAC 50.055(c)(1)
20	18 AAC 50.350(d)(1)(A) 18 AAC 50.350(d)(3)	40 C.F.R. 60 Subpart OOO	18 AAC 50.040(a)(2)(FF)		
21	18 AAC 50.350(d)(1)(A) 18 AAC 50.350(d)(3)	40 C.F.R. 60 Subpart Kb	18 AAC 50.040(a)(2)(M)		
22, 23	18 AAC 50.350(f)(3) 18 AAC 50.350(d)(1)(A) 18 AAC 50.350(d)(3)	40 C.F.R. 52.75*	18 AAC 50.040(e)	18 AAC 50.050(f)	18 AAC 50.045(d)
24.4	18 AAC 50.350(f)(3)				18 AAC 50.110
25	18 AAC 50.350(f)(3) 18 AAC 50.350(d)(1)(A) 18 AAC 50.350(d)(3)	40 C.F.R. 52.75*	18 AAC 50.040(e)	18 AAC 50.110	
26	18 AAC 50.350(d)(1)(D) 18 AAC 50.350(d)(3) 18 AAC 50.350(f)(3) AS 46.14.120(d)				
27	18 AAC 50.350(f)(3)				AS 46.14.215
28	18 AAC 50.350(c)				18 AAC 50.410(a) 18 AAC 50.420(a)
24.1, 24.2, 24.3	All the above				

**40 CFR 52.75 is the adoption by reference to the State of Alaska emission standards adopted by reference see Approved SIP Citation for citation and date.**



## ATTACHMENT 4: Emission Fee Calculations

### Attachment 4: Emission Fee Calculations

For the Period July 1 of the previous year to June 30 of the current year. Emission fees are due no later than August 1 of the current year.
NO <sub>x</sub> TPY (A) = tons of soil processed multiplied by
0.0000375 for diesel fired SRU      0.000015 for natural gas fired SRU
CO TPY (B) = tons of soil processed multiplied by
0.000018 for diesel fired SRU      0.000028 for natural gas fired SRU
NO <sub>x</sub> TPY (C1) from diesel generators      Multiply kW hours by 0.000020786 = C1
CO TPY (C2) from diesel generators      Multiply kW hours by 0.000004479 = C2
SO <sub>2</sub> TPY (D) = gals of diesel burned for the year multiplied by 0.0000355
Determine Total NO <sub>x</sub> A + C1 = X    Determine Total CO    B + C2 = Y
If either X or Y or D is less than 10 tons do not include in calculation below.
NO <sub>x</sub> (X) + CO (Y) + SO <sub>2</sub> (D) = Total emissions in tons per year (TPY)
Total emissions (TPY) x \$5.07 = Emission Fee in \$

## **ATTACHMENT 5: Source Test Operational Parameter Recording**

### **Continuously monitor the following parameters and record the average value**

the contaminated soil processing rate: \_\_\_\_\_ tons/hour (if the facility processes contaminated soil)

water flow rate(s) used to spray processed soil for particulate control: \_\_\_\_\_ gallons/minute

the fines percentage \_\_\_\_\_ [<200 mesh using ASTM 422-63(1990)]

Perform Method 9 opacity readings, 10 6minute averages for each Method 5 test run. Compute the Average hourly opacity for the Method 5 test.

### **For a facility using a baghouse:**

the baghouse exit temperature: \_\_\_\_\_ EF

the pressure drop across the baghouse: \_\_\_\_\_ inches of water

### **For a facility using a scrubber:**

the pressure drop across the scrubber: \_\_\_\_\_ inches of water

water flow rate: \_\_\_\_\_ gallons/minute

### **Obtain the following information:**

obtain a representative sampling of the fines percentage (-200 mesh)

### **For a facility using a scrubber, record the following parameters:**

pond size: \_\_\_\_\_

pond depth: \_\_\_\_\_

type of liner used: \_\_\_\_\_

is the water recycled ☐ Yes ☐ No

makeup water flow rate: \_\_\_\_\_ gallons/hr

## ATTACHMENT 6: Excess Emissions Reporting Form

### Excess Emission Notification Form

Submit to: Facsimile: (907) 269-7508 Telephone: (907) 269-8888 Email:  
[airreports@envircon.state.ak.us](mailto:airreports@envircon.state.ak.us)

Company Name

Facility Name

1. Event Information (Use 24-hour clock):

END Time: START Time: Duration (hr:min):

Date: \_\_\_\_\_:\_\_\_\_\_ \_\_\_\_\_:\_\_\_\_\_ \_\_\_\_\_:\_\_\_\_\_

Date: \_\_\_\_\_:\_\_\_\_\_ \_\_\_\_\_:\_\_\_\_\_ \_\_\_\_\_:\_\_\_\_\_

Total: \_\_\_\_\_:\_\_\_\_\_

2. Cause of Event (Check all that apply):

- ☐ START UP ☐ UPSET CONDITION ☐ CONTROL EQUIPMENT  
☐ SHUT DOWN ☐ SCHEDULED MAINTENANCE ☐ OTHER

Provide a detailed description of what happened. Attach additional sheets as necessary.

3. Sources Involved:

*Identify each Emission Source involved in the event, using the same identification number and name as in the Permit. List any Control Device or Monitoring System affected by the event. Attach additional sheets as necessary.*

Source ID No.	Source Name	Description	Control Device
/	/	/	.
/	/	/	.

4. Emission Standard Exceeded:

*Identify each Emission Standard and Permit Condition exceeded during the event. Describe in detail, the extent to which each Standard or Condition was exceeded. List ALL known or suspected injuries or health impacts. Attach additional sheets as necessary.*

Standard or Condition	Limit	Exceedence
/	/	.
/	/	.

5. Emission Reduction:

*Describe in detail, ALL of the measures taken to minimize and/or control emissions during the event. Attach additional sheets as necessary.*

**6. Corrective Actions:**

*Describe in detail, ALL of the corrective actions taken to restore the system to normal operation. Attach additional sheets as necessary.*

Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.

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Printed Name    Signature

---

Date:

## ATTACHMENT 7: QA Plan Requirements for CO & O<sub>2</sub> CEMS for SRUs

QUALITY ASSURANCE PLAN REQUIREMENTS FOR CARBON MONOXIDE AND OXYGEN CONTINUOUS EMISSION MONITORS FOR SOIL THERMAL TREATMENT UNITS Reference: 40 CFR 60, Appendices B & F.

1. CO/O<sub>2</sub> CEM span values not to exceed (NTE) 250ppm, and NTE 25% O<sub>2</sub>.
2. A relative accuracy test audit (RATA) must be conducted within 90-operating days of startup, and once every 4 operating quarters if CO averages 50ppm or more.
3. A 3-point Calibration is required every 90-operating days. Calibration gas to be certified reference method (CRM) or Protocol 1 gas. Maximum strength is 150ppm CO and 25% O<sub>2</sub>. Calibration can be conducted coincident with a cylinder gas audit (CGA).
4. A CGA is allowed in lieu of a relative accuracy audit if the CO averages less than 50ppm.
5. For a CGA with CRM or protocol 1 low range audit gas, the low range CO concentration must be anywhere from 15 to 45ppm and from 75 to 150ppm for the high range audit gas. Clean ambient air can be zero gas.
6. Use a CO wand at least every 90-operating days to check for leaking fitting or valves on sample line. Also leak check just after sample line fitting or inline valve setting is changed.
7. Table of daily calibration drift limits.

### DAILY CALIBRATION DRIFT LIMITS\*

Time Period	CO ppm. Must be the lessor of: % of Span, or (ppm for 250ppm span)	% O <sub>2</sub>	Action Required****
6 out of 7 consecutive days**	5 (12.5)	0.5***	Adjust
One day	10 (25)	1.0	Adjust
5 consecutive days	10 (25)	1.0	Out of control repair/replace
One day	20 (50)	2.0	Out of control repair/replace

\* To be conducted at the zero and high-level values. See above reference.

\*\* 7 - day drift test with out adjustment.

\*\*\* for 7 out of 7 consecutive days.

\*\*\*\* when limit is exceeded.

## **ATTACHMENT 8: Non-Road Engines**

[Code of Federal Regulations] [Revised as of July 1, 1997]

From the U.S. Government Printing Office via GPO Access

[CITE: 40CFR89.2]

### **TITLE 40--PROTECTION OF ENVIRONMENT**

#### **CHAPTER I--ENVIRONMENTAL PROTECTION AGENCY**

#### **PART 89--CONTROL OF EMISSIONS FROM NEW AND IN-USE NONROAD ENGINES--Table of Contents**

##### **Subpart A--General**

##### **Sec. 89.2 Definitions.**

The following definitions apply to part 89. All terms not defined herein have the meaning given them in the Act.

Nonroad compression-ignition engine means a non-road engine which utilizes the compression-ignition combustion cycle.

Nonroad engine means:

(1) Except as discussed in paragraph (2) of this definition, a non-road engine is any internal combustion engine:

(i) in or on a piece of equipment that is self-propelled or serves a dual purpose by both propelling itself and performing another function (such as garden tractors, off-highway mobile cranes and bulldozers); or

(ii) in or on a piece of equipment that is intended to be propelled while performing its function (such as lawnmowers and string trimmers); or

(iii) that, by itself or in or on a piece of equipment, is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform.

(2) An internal combustion engine is not a non-road engine if:

(i) the engine is used to propel a motor vehicle or a vehicle used solely for competition, or is subject to standards promulgated under section 202 of the Act; or

(ii) the engine is regulated by a federal New Source Performance Standard promulgated under section 111 of the Act; or

(iii) the engine otherwise included in paragraph (1)(iii) of this definition remains or will remain at a location for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. Any engine (or engines) that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period. An engine located at a seasonal source is an engine that remains at a seasonal source during the full annual operating period of the seasonal source. A seasonal source is a stationary source that remains in a single location on a permanent basis (i.e., at least two years) and that operates at that single location approximately three months (or more) each year. This paragraph does not apply to an engine after the engine is removed from the location.

[59 FR 31335, June 17, 1994, as amended at 61 FR 52102, Oct. 4, 1996]

## **ATTACHMENT 9: Visibility and Particulate-Emissions-Monitoring Flow Chart**

### Visibility and Particulate Monitoring Flow Chart

